

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
Administration of the North )  
American Numbering Plan )

CC Docket No. 92-237

To: The Commission

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**APPLICATION OF TELEPORT COMMUNICATIONS GROUP INC.  
FOR MEMBERSHIP ON THE NORTH AMERICAN NUMBERING COUNCIL**

Teleport Communications Group Inc. ("TCG") submits this application for membership on the North American Numbering Council ("Council"), pursuant to the Commission's Public Notice, DA 95-1721, released August 9, 1995.<sup>1</sup>

**I. TCG CAN BRING A UNIQUE PERSPECTIVE AND MAKE AN IMPORTANT CONTRIBUTION TO THE FUNCTIONS OF THE COUNCIL**

TCG is the nation's oldest and largest competitive provider of local exchange and access telecommunications services, and offers an array of switched and private line services to business and residential customers. TCG has the most extensive competitive service provider network in the nation.<sup>2</sup> TCG currently provides services in 17 states and in 32 two major metropolitan areas,<sup>3</sup> is authorized to provide local exchange

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1. 60 Fed. Reg. 42,158 (1995).

2. See Jonathan M. Kraushaar, Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, Fiber Deployment Update End of Year 1994 at 35-36, 43 (rel. July 12, 1995) ("Fiber Deployment Report").

3. See Fiber Deployment Report at 43.

switched telecommunications services in 7 states,<sup>4</sup> and has applications pending in 7 additional states.<sup>5</sup>

As a competitive provider of switched local exchange services and access services, TCG is deeply concerned about the equitable administration of numbering resources which are crucial to its ability to offer a genuine alternative to the established local exchange carriers. In view of its profound interest in numbering issues and in the administration of the North American Numbering Plan ("NANP"), TCG has actively participated in the above-captioned proceeding and in other Commission proceedings involving numbering issues.<sup>6</sup> TCG is also actively participating in various industry forums involving telephone number portability and area code relief issues.<sup>7</sup>

TCG has also brought its concerns regarding numbering issues to the Commission's attention through two declaratory

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4. TCG is authorized to provide local exchange switched telecommunications services in New York, Illinois, Massachusetts, Washington, Maryland (business), Connecticut, and Michigan.

5. TCG has filed such applications in California, Florida, Texas, Pennsylvania, Maryland (residential), Wisconsin, and Arizona.

6. TCG has participated in the Commission's proceeding involving Illinois Bell's proposed overlay plan, see Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech-Illinois, 10 FCC Rcd 4596 (1995), and will be participating in the Commission's Telephone Number Portability proceeding, CC Docket No. 95-116 (rel. July 13, 1995).

7. TCG is participating in the review of number portability issues being conducted by the Industry Numbering Committee ("INC"), the standing committee of the Industry Carriers Compatibility Forum, which operates under the auspices of the Carrier Liaison Committee of the Alliance for Telecommunications Industry Solutions.

ruling petitions in which it has requested that the Commission address the area code relief and central office code practices of Pacific Bell and Southwestern Bell.<sup>8</sup> In sum, TCG is at the forefront of competitive carriers' efforts to assure the equitable administration of the NANP and to introduce competition into the local telecommunications marketplace.

As the Commission's Public Notice notes, the Council's responsibilities include advising the Commission on numbering issues, selecting and guiding a neutral NANP Administrator, applying Commission policy to resolving issues arising in the administration of the NANP, and conducting initial dispute resolution of all issues. In discharging these duties, the Council will be required to assure that the administration of the NANP facilitates entry into the telecommunications marketplace, that the NANP does not favor any particular industry group, and that "the NANP gives consumers easy access to the public switched telephone network."<sup>9</sup> Given TCG's substantial experience with numbering issues and with the administration of the NANP, TCG can clearly bring a unique and important perspective to the Council and would make important contributions to its functions.

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8. See "Commission Seeks Comment on Teleport Petition for Declaratory Ruling on Pacific Bell Area Code Numbering Plan," Public Notice, DA 94-1482 (rel. Dec. 15, 1994); "Commission Seeks Comment on Emergency Petition for Declaratory Ruling on Refusal of Central Office Code Assignments," Public Notice, DA 95-1845 (rel. Aug. 21, 1995).

9. Public Notice at 1-2.

## II. TCG APPLICATION FOR MEMBERSHIP ON THE COUNCIL

The following information is provided pursuant to Section I.B.5 of the Commission's Public Notice.

(a) TCG hereby applies for membership on the Council and, to represent its interests, nominates Kenneth A. Shulman, Senior Vice President, Technology of TCG. Mr. Shulman has nearly twenty years of experience in telecommunications systems engineering and applications for voice, data, and video transmission. As TCG's Chief Technology Officer, Mr. Shulman is responsible for the architecture of TCG's systems, technology, standards, and for network development matters.

Mr. Shulman holds B.S. and M.S. degrees in Electrical Engineering, respectively, from the State University of New York at Stony Brook and from the University of Rochester, and an M.B.A. degree from the Wharton School of Business and Finance of the University of Pennsylvania. Mr. Shulman is a member of the IEEE and the International Engineering Consortium Executive Council. He is a member of the Board of Directors of the Alliance for Telecommunications Industry Solutions and is currently Chairman of its Liaison committee.

Mr. Shulman has been a leading industry figure on numbering matters for many years. He was perhaps the first industry proponent of service provider number portability, presenting a paper advocating that principle to a national

standards committee in 1989.<sup>10</sup> Mr. Shulman also was among the original co-Chairmen of the Industry Numbering Committee Number Portability Workshop and was a member of the Central Office Code Guideline Forum, which prepared the Central Office Code Assignment Guidelines now used in the industry.

On the Council, Mr. Shulman will represent the interests of TCG and other competitive providers of local exchange and access services. Mr. Shulman has significant and direct experience with the administration of numbering resources, numbering disputes, and the issues confronting new entrants that require numbering resources on a timely and efficient basis.<sup>11</sup> It is the Commission's intent that the Council include representatives from every sector of the telecommunications industry.<sup>12</sup> TCG, through its nominee, Mr. Shulman, clearly represents an important sector of the industry -- the competitive carrier sector.

(b) Mr. Shulman's mail address, telephone number, facsimile number, and e-mail address are:

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10. See Kenneth A. Shulman, "ISDN Numbering Plan for Number Portability with Competing/Overlapping Local Service Providers," May 10, 1989, Paper No. TISI.4-89.123.

11. See Tim Greene, Local Number Portability Scheme Passes Field Test, Network World, June 12, 1995, at 20 (Attachment A).

12. Public Notice at 1.

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(c) Mr. Shulman, as an officer of TCG, is authorized to represent TCG's interests.

(d) As discussed above, TCG is the nation's leading competitive provider of local exchange and access services and is directly and significantly affected by the administration of the NANP and the resolution of numbering disputes. TCG is an interested party in the activities of the Council because the actions of the NANP Administrator -- which the Council will guide -- directly affect TCG's ability to provide local exchange and access services in competition with the established local exchange carriers. TCG will be equally affected by the Council's efforts to assure that the NANP Administration supports the Commission's policy objectives with regard to numbering matters.<sup>13</sup>

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13. The Council is responsible for assuring that NANP administration supports the following Commission policy objectives "(1) that the NANP facilitates entry into the communications marketplace by making numbering resources available on an efficient, timely basis to communications service providers; (2) that the NANP does not unduly favor or disfavor any particular industry segment or group of consumers; (3) that the NANP gives due regard to state and local interests; (4) that the NANP does not unduly favor one technology over another; (5) that the NANP gives consumers easy access to the public switched telephone network; and (6) that the NANP ensure that the interests of all NANP member countries are addressed fairly and efficiently, fostering continued integration of the NANP across NANP member countries." Public Notice at 1-2.

(e) TCG hereby makes a written commitment that Mr. Shulman will actively participate in good faith in the objectives of the Council.


### III. CONCLUSION

For the reasons stated above, TCG requests that the Commission grant its application for membership on the North American Numbering Council.

Respectfully submitted,

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**ATTACHMENT A**



# NetworkWorld

THE NEWSWEEKLY OF ENTERPRISE NETWORK COMPUTING

Boston August 7-8, 1995

## Local number portability scheme passes field test

*But bypass carriers argue LECs retain too much control.*

By Tim Greene  
Seattle

A system that lets users keep their old phone numbers when they change local carriers has proved successful in a test here but came up short of what competitive access providers (CAP) want.

CAPs contend that some form of local number portability is necessary if they are to enter markets as co-carriers — the kind of competition that could push down prices for users. Lack of portability handcuffs users that might want to switch to a less expensive carrier but do not want to give up a phone number familiar to their customers.

Results of a trial involving three local carriers here show that at least one method works for routing calls from one network to another when a user changes carriers. But the system design still gives the local exchange carrier (LEC) the potential to control the sorting of where calls from other local carriers or interexchange carriers are directed — an arrange-

ment unacceptable to CAPs.

Leaving the sorting function in the hands of LECs gives them access to too much knowledge about competitors' traffic, said Ken Shulman, vice president of applied research and development for Teleport Communications Group (TCG).

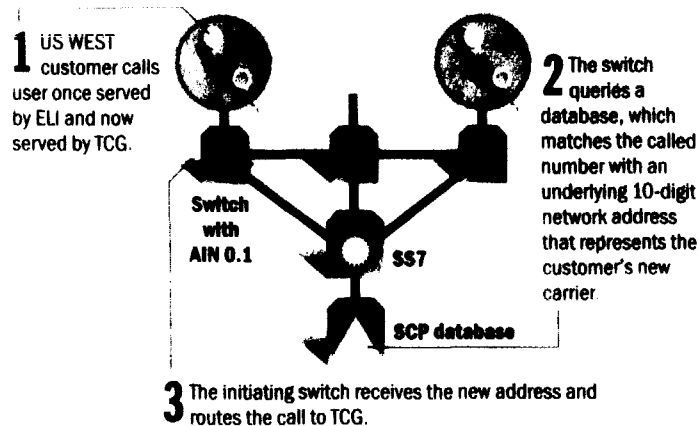
The CAPs' objection promises to be the major roadblock to whatever number portability plan ultimately is chosen.

The proof-of-concept trial was meant simply to prove that the technology could work and to offer the results to the industry for consideration as a possible solution, according to Brad Baxter, number portability trial administrator for U.S. Intelco Networks, Inc. U.S. Intelco helped design the trial along with Stratus Computer, Inc. and Electric Lightwave, Inc. (ELI).

The trial here was an effort to move phone numbers among ELI, US WEST, Inc. and TCG switches. The design uses Advanced Intelligent Network 0.1 software in carrier switches to

Take a number and keep it

A Seattle trial has shown that a prototype number portability scheme works among US WEST, Electric Lightwave (ELI) and Teleport Communications Group (TCG) switches equipped with Advanced Intelligent Network 0.1 software.



GRAPHIC BY SUSAN J. CHAMPNEY

interrupt calls in process and query a database through Signaling System 7 (SS7).

A network database is used to match the called number with an underlying 10-digit number needed to route the call to the appropriate carrier.

Baxter said one strength of the trial was that it took place within a live commercial network, not a laboratory. The next phase, which has already begun, will examine performance and test SS7 links.

The final phase will test the

number portability scheme in combination with switch-based services, such as enhanced 911, and operator services to see how they interact.

A report on the trials is scheduled to be issued in August, according to Baxter.

### Different approach

This number portability scheme differs from one advanced last month by AT&T (NW, May 8, page 6), Baxter said. These two approaches are not in competition but are meant to

explore possible solutions.

"We're just looking at the good, the bad and the ugly for the concept," Baxter said.

The only number portability used commercially so far is a form of remote call forwarding in which a called number is directed to the carrier for which the number was originally issued. The call is forwarded within the public-switched network to a second number assigned to the same user. That is seen as a strictly interim solution because it eats up an extra phone number at a time when they are becoming scarce.

The test here does not use up a second active phone number. Each ported number has an underlying number that looks like a phone number but is just a network node address, Baxter explained.

Both Baxter and Shulman said a national organization should oversee finding a solution rather than attacking the problem in independent trials. Shulman pointed to the Federal Communications Commission as the party that should get involved. Baxter said an industry implementation forum designed to deal with the technical aspects of potential solutions is needed.

Shulman said he thought it would take two years for a solution to be found. ■